

What is claimed is:

1. An apparatus for measuring a weight load of a human being, comprising:
a long-box comprised of side-walls and a bottom, wherein the bottom is comprised of a plurality of independent plates, the plates defining a pathway upon which the human being moves freely;
a plurality of weight sensors for measuring the weight load exerted by an individual leg of the human being, wherein each of the plurality of weight sensors is independently attached to a corresponding plate of the plurality of plates on the bottom of the long-box and independently measures the weight load while the human being walks freely; and
a signal processing means for processing an electric signal from each of the plurality of weight sensors, in order to provide a result of the measured weight.
2. The apparatus of Claim 1, wherein each of the plurality of plates is sized depending on a stride of the human being.
3. The apparatus of Claim 2, wherein the plurality of plates are arranged along two rows.
4. The apparatus of Claim 1, wherein each of the plurality of weight sensors is a load cell.
5. The apparatus of Claim 1, further comprising:
a starting platform connected to an end of the long-box; and
an arriving platform connected to the other end of the long-box,

wherein the human being is free to walk from the starting platform to the arriving platform through the long-box.

6. The apparatus of Claim 1, wherein the result is represented by one of a numerical value and a graphical representation, the graphical representation being a time-dependent graph.

7. The apparatus of Claim 1, wherein the long-box is comprised of side-columns substituting the side-walls and the bottom.

8. A method of measuring a weight load of a human being, comprising the steps of:

- (a) providing a long-box comprised of side-walls and a bottom, wherein the bottom is comprised of a plurality of independent plates, the plates defining a pathway upon which the human being moves freely;
- (b) allowing the human being to move through the long-box;
- (c) measuring a weight load exerted by an individual leg of the human being through a plurality of weight sensors, wherein each of the plurality of weight sensors is independently attached to a corresponding plate of the plurality of plates on the bottom of the long-box and independently measures the weight load while the human being walks freely; and
- (d) processing an electric signal from each of the plurality of weight sensors to provide information relating to the weight load.

9. The method of Claim 8, wherein the long-box is comprised of side-columns substituting the side-walls and the bottom.

10. A method of analyzing effects of an analgesic drug and/or a medical treatment on an inflamed leg of a human being, comprising the steps of:

- (a) providing a box which includes a plurality of sensors attached to a bottom of the box;
- (b) directing the human being to walk;
- (c) measuring independently a first weight load exerted by the inflamed leg and a second weight load exerted by a normal leg;
- (d) injecting an analgesic drug into and/or applying a medical treatment on the inflamed leg;
- (e) measuring a third weight load exerted by the inflamed leg and a fourth weight load exerted by the normal leg, after the human being walks voluntarily through the box;
- (f) computing a first ratio of the first weight load to the second weight load and a second ratio of the third weight load to the fourth weight load;
- (g) calculating a difference between the first and second ratios; and
- (h) determining the effects of the analgesic drug and/or the medical treatment before and after the administration of the analgesic drug into and/or the application of the medical treatment on the inflamed leg, on the basis of the calculated difference.

11. The method of Claim 10, wherein the information is one of a numerical value and a time-dependent graph.

12. A method of evaluating severity of pain in an inflamed leg of a human being, comprising the steps of:

- (a) measuring a first weight load exerted by the inflamed leg and a second

weight load exerted by a normal leg,

wherein the measuring step (a) further comprises the steps of:

- (i) providing a long-box comprised of side-walls and a bottom, wherein the bottom is comprised of a plurality of independent plates, the plates defining a pathway on which the human being moves freely;
- (ii) directing the human being to move through the long-box;
- (iii) detecting the first and second weight loads exerted by the inflamed leg and the normal leg, respectively, of the human being through a plurality of weight sensors, wherein each of the plurality of weight sensors is independently attached to a corresponding one of the plurality of plates on the bottom of the long-box and independently measures the weight load; and
- (iv) processing electric signals from the plurality of weight sensors to provide information relating to the first and second weight loads exerted by the inflamed leg and the normal leg of the human being, and

(b) evaluating severity of pain on the basis of the information relating to the first and the second weight loads,

wherein the evaluating step (b) further comprises the steps of:

- (i) computing a ratio of the first weight load to the second weight load;
- and
- (ii) comparing the ratio with a predetermined number to grade the severity of pain.

13. The method of Claim 12, wherein the pain is an arthritic pain.

14. The method of Claim 12, wherein the long-box is comprised of side-columns substituting the side-walls and the bottom.